Methods of Impact Measurement
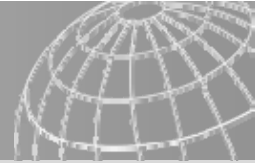
Presentation by

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For

GTZ Financial Systems Development Retreat

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Recent trends

- Since 2008 a series of microfinance impact studies with experimental design (*randomized control trial*)
- Suggest that microfinance has
    - » only very limited effect on poverty reduction
    - » No statistically significant effect on Human Development Measures (women empowerment, child health, participation in and spending on children education)
- Does microfinance have impact?
- however, results are consistent with idea that impact happens in stages, where non-economic changes happen only at the end
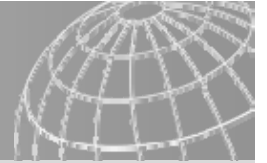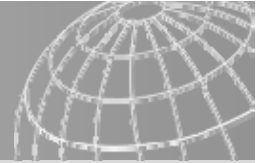
Challenges in measuring impact

- **Main challenge: Selection Bias**

- In order to measure impact **a treatment group and a control group** is necessary

- **Control group** is needed to count for the counterfactual (what would have happened if the customer had not obtained any microfinance services?)

- Taking non-clients as control group has an inherent **selection bias** (microfinance clients could be better off than non-clients because they are more entrepreneurial)

- Selection bias **overstates the measured impact**
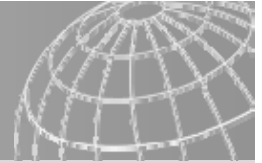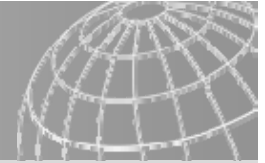
Evaluation Methods (Pros and Cons)

- Three evaluation methods**: experimental design, quasi-experimental and non-experimental.**

- More recent studies use experimental design, which eliminates the selection bias: Randomized Controlled Trial (RCT)

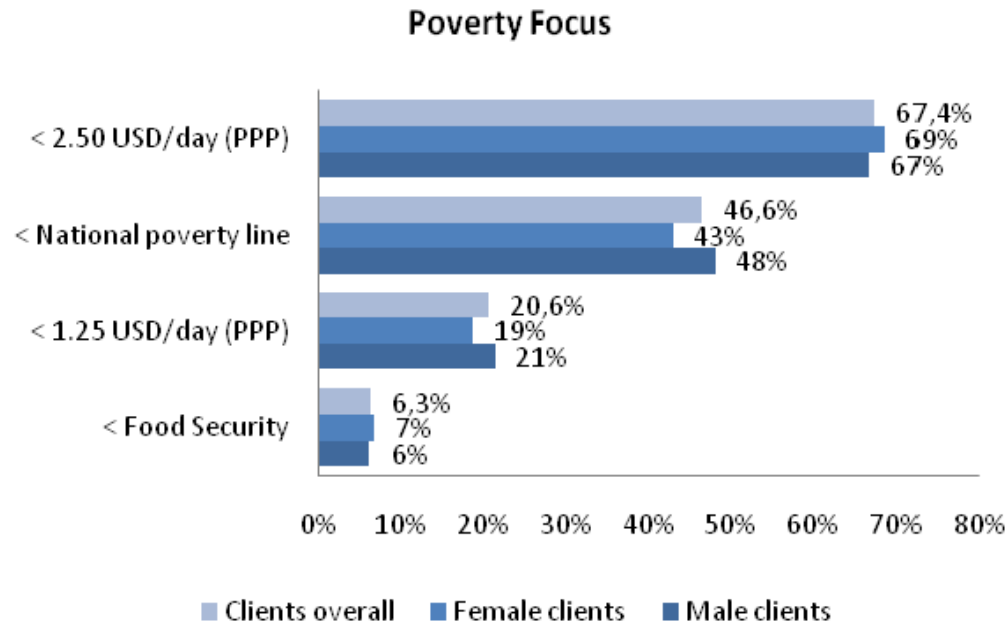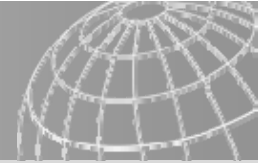|	Experimental	Quasi-Experimental	Non-experimental
Characteristics	• Assigns households randomly to treatment and control groups in advance of applying the treatment • The control group is denied access to financial services • E.g. GTZ Philippines	• Attempt to eliminate selection bias through statistical strategies • E.g. GTZ Sri Lanka	• Include qualitative studies which do not attempt to identify treatment or comparison groups • Does not necessarily show impact but quality of daily life • E.g. „Portfolios of the Poor", using financial diaries

Evaluation Methods (Pros and Cons) (cont'd)

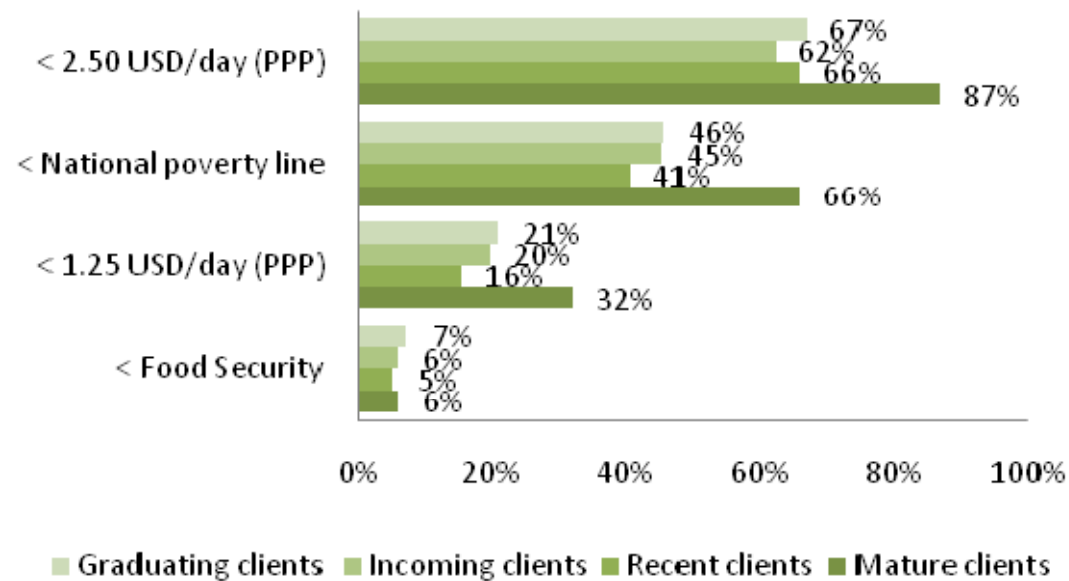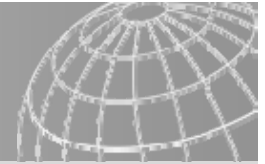|	Experimental	Quasi-Experimental	Non-experimental
Pros	• Eliminates selection bias	• Can be conducted after programme already in place • Conclusions tend to be more widely applicable than experimental design studies	• Quick and inexpensive • Can complement quanitative research
Cons	• Assignment to treatment group in advance • Very limited time horizon • Not possible in every situation, e.g in countries such as Bangladesh or Sri Lanka with high microfinance outreach • Expensive • Possible ethical issues	• Statistically challenging to overcome selection bias • Not certain if selection bias is eliminated	• The counterfactual not addressed, since no control group • Selection bias not addressed

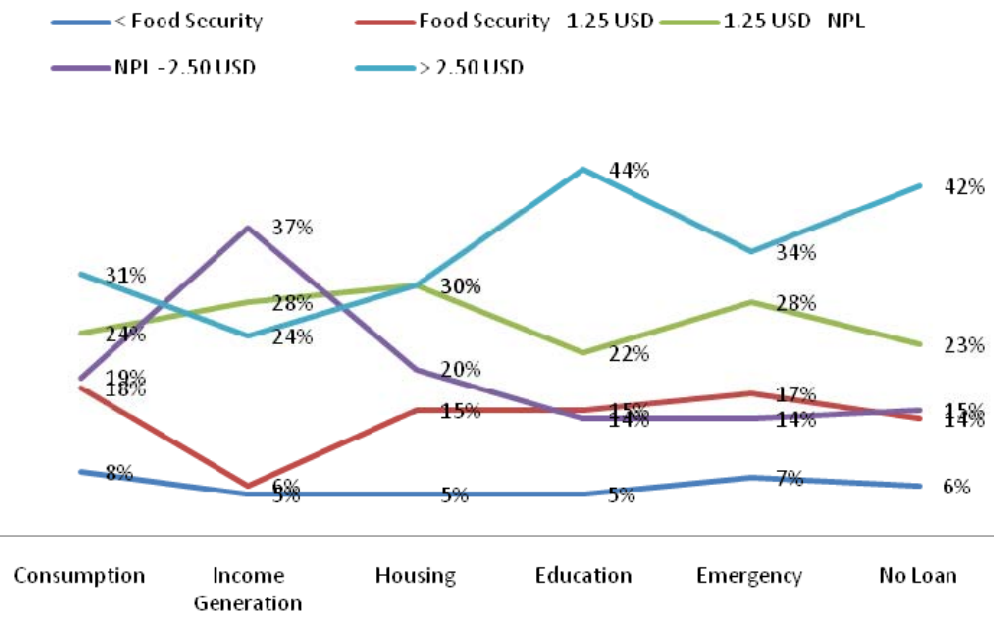# Innovative tools to measure poverty and change on poverty

Poverty Focus

- Clients overall
- Female clients
- Male clients

Client graduation

< 2.50 USD/day (PPP) — 67% / 62% / 66% / 87%
< National poverty line — 46% / 45% / 41% / 66%
< 1.25 USD/day (PPP) — 21% / 20% / 16% / 32%
< Food Security — 7% / 6% / 5% / 6%

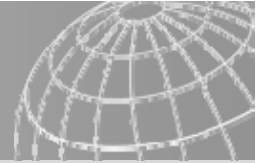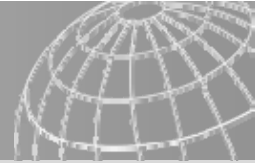■ Graduating clients ■ Incoming clients ■ Recent clients ■ Mature clients

Poverty Distribution according to loan purpose

Conclusions

➢ Methods to be applied depend on the country and project context

➢ So far impact assessment is focusing mainly on micro credit.

➢ Impact of savings, insurance and money transfer still to be addressed (e.g. MIPSS in Philippines)

➢ Innovative (*quick and dirty)* tools to measure poverty and changes on poverty are becoming more popular (e.g. Progress out of Poverty Index)

Annex: Results from recent experimental impact survey in India

- Business profits:
  - double as high as in control group – but not statistically significant
- Household expenditures:
  - spending on durables in a business 127% higher than in control group
  - 10.7% drop in temptation spending (alcohol, tobacco, gambling, food and tea outside home)
- Human Development Measures:
  - no statistically significant effects on women empowerment, child health, participation in and spending on children education
  - however the time horizon was only 15-18 months